

INCAST[®]

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CASTING CONTEST

Industrial Award

Signicast Investment Cast Component Replaces Two Heavily Machined Pieces and Stamped, Formed & Welded Tang

A safety device, at one time a three-piece assembly which required machining, stamping, forming and welding, has now been replaced by two-piece investment casting.

The winner of the Institute's Industrial Award was cast in 17-4 PH Stainless Steel and manufactured by Signicast Corporation, Hartford, WI. The detachable sayflink is part of a moveable safety device which easily and securely attaches to a horizontal safety wire and stops a worker's fall in case of an accident.

The original assembly consisted of two heavily machined pieces and a stamped, formed and welded tang. The component now consists of two lightly machined investment castings, one of which includes the tang feature.

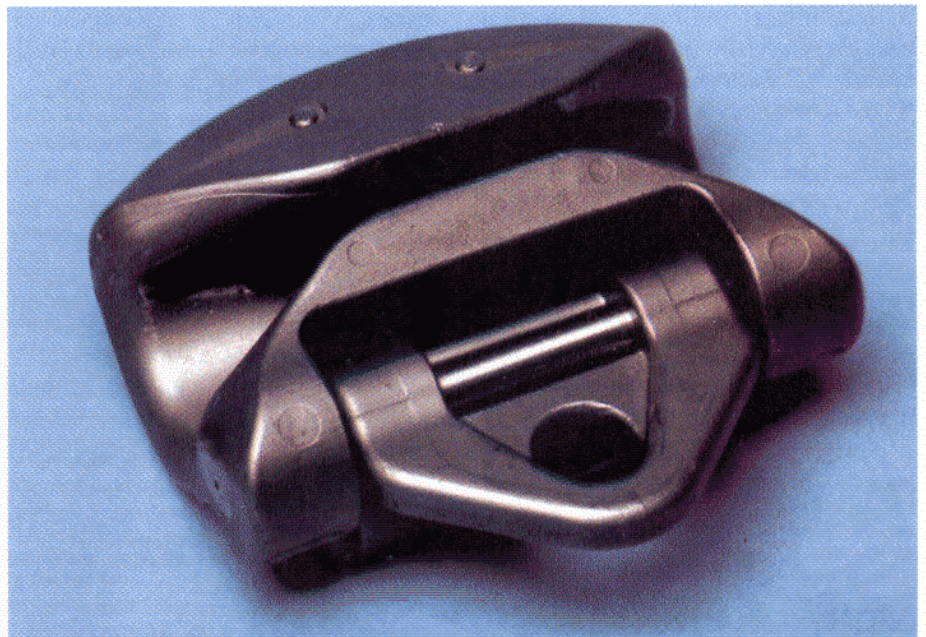
The result is a significant reduction in cost. In addition, the assembly is now 20% lighter with increased performance. The lighter weight makes handling easier, which can be critical when personal safety is at stake. Casting the components provided the opportunity to incorporate large radii

and smooth edges, thus improving ease of handling without incurring additional costs.

The strength of the finished component is also optimized by the inherent ability of investment casting to

sculpt the exact dimensions and shape to minimize high stress levels in critical areas of the component.

The unique appearance and integration of components made the device a more marketable component.



Two-piece investment cast component replaces three-piece assembly requiring machining, stamping, forming and welding.